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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,270	10/07/2003	Volker Block	304-814	6350
30448	7590	09/03/2004	EXAMINER	
AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188			JEFFERY, JOHN A	
			ART UNIT	PAPER NUMBER

3742

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/680,270	Applicant(s) BLOCK ET AL. W	
	Examiner John A. Jeffery	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 22 is/are rejected.
- 7) ☒ Claim(s) 18-21 and 23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20031215</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Disclosure Objections

The disclosure is objected to because of the following informalities:

All references to specific claim numbers in the specification must be deleted since the scope, content, and numbering of the claims can change during prosecution. Appropriate correction is required.

Claim Objections

Claims 10-23 are objected to because of the following informalities:

Claim 10: In lines 2-3, "in the case of correct heating device use" must be deleted for clarity and brevity. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. The test for definiteness under 35 U.S.C. § 112, second paragraph is whether "those skilled in the art would understand what is claimed when the claim is read in light of the

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specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986).

In line 2, it is unclear what is meant by the phrase "insulated to the outside between said connections to said contacts." (emphasis added.) Applicant must redraft the claim for clarity. For examination purposes, the examiner interprets the claim to call for any insulated metallic connection bridge.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 10-17 are rejected under 35 USC 102(b) as being anticipated by Ayer (US 839,255). Ayer (US 839,255) discloses a thermal fuse for an electric heating element D comprising metallic "connection bridge" F fastened to contacts of the electric heater by solder G. Upon reaching a predetermined temperature, solder G melts causing "connection bridge" F to fall downwardly by gravity thus opening the circuit and preventing further heating. See Figs. 1 and 2 and P. 1, lines 60-87.

Regarding claim 4, air chamber B inherently insulates the metallic connection bridge to the outside. Regarding claims 5-7, in view of the horizontal mounting and attachment of connection bridge F solely by solder G, there is inherently (1) a tilting

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moment with respect to one or both of the contacts, and (2) a center of gravity outside a connection line between the contacts.

Joint Inventors -- Common Ownership Presumed

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligations under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Claim Rejections - 35 U.S.C. § 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayer (US 839,255). The claims differ from the previously cited prior art in calling for the

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connection bridge's center of gravity to be laterally alongside the connection line between the contacts and for the bridge to be U-shaped. However, selecting a certain shape of the connection bridge to produce a certain center of gravity is well within the level of one of ordinary skill in the art. For example, applicant in Para. 049 of the instant specification notes that the shape of the connection bridge can be "extensively varied." Moreover, in the last sentence, applicant states that such variants are "obvious to anybody skilled in the art." Therefore, varying the shape of the connection bridge to alter its center of gravity is not seen to be critical and is well within the level of the skilled artisan.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ayer (US 839,255) in view of Schon et al (US 6,445,276). The claim differs from the previously cited prior art in calling for the contact connections to comprise a preheating resistor. Electrically-heated connection bridge contacts, however, are well known in the art. Schon et al (US 6,445,276), for example, discloses solder 9 that connects connection bridge 7 to contacts 5. The solder heats in proportion to the amount of electrical current passed therethrough. At a predetermined temperature, the solder melts opening the circuit. See last two sentences of abstract and col. 4, line 66 - col. 5, line 28. Such self-heating of the solder itself ensures melting upon reaching a predetermined temperature due to overcurrent conditions. In view of Schon et al (US 6,445,276), it would have been obvious to one of ordinary skill in the art to provide a

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self-heating solder to ensure melting upon reaching a predetermined temperature due to overcurrent conditions.

Allowable Subject Matter

Claims 18-21 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant should (1) separately consider the art, and (2) consider the art together with the previously cited prior art for potential applicability under 35 U.S.C. §§ 102 or 103 when responding to this action. US 885, US 396, GB 455, US 567, US 430, US 340 disclose thermal fuses relevant to the instant invention.

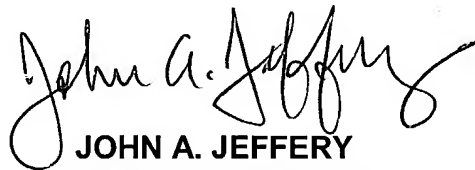
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Jeffery whose telephone number is (703) 306-4601. The examiner can normally be reached on Monday - Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans, can be reached on (703) 305-5766. All faxes should be sent to the centralized fax number at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)


JOHN A. JEFFERY
PRIMARY EXAMINER

9/2/04